XXXIII.—New Neotropical Mammals, with a Note on the Species of Reithrodon. By OLDFIELD THOMAS, F.R.S.

Dasypterus ega and its subspecies.

Examples of Dasypterus ega from the wide range of the species agree very closely in size and in the characters of the ears, skull, and teeth; but there is considerable variation in colour and of so distinctly geographical a nature that the different forms should evidently be recognized as subspecies.

The Lower Californian form, D. e. xanthinus, has already

been described *.

Dasypterus ega panamensis, subsp. n.

General colour dark brownish clay-colour, something between Ridgway's "raw amber" and "clay-colour." Fur black basally, then dull brownish buffy, the extreme tips black. Centre of face similar to back, cheeks from eyes to lips contrasted black. Rump and hairy part of interfemoral verging towards brownish fulvous. Under surface similar to upper.

Forearm 46.5 millim.

Hab. Bogava, Chiriqui, Panama. Altitude 250 m. Type. Male. B.M. no. 0. 7. 11. 1. Collected 8th October, 1898, by Mr. H. J. Watson. One specimen.

Dasypterus ega fuscatus, subsp. n.

Very similar to panamensis, but even darker, the fine black tips to the dorsal hairs more developed, so that the colour may be said to be washed or marbled with black. Crown and centre line of face blackish brown, much darker than the back; cheeks and lips similar, not markedly darker. Interfemoral not more fulvous than back. Under surface similar in its brownish tone to the back, but not black-washed, the hairs being without black tips.

Forearm 47-48 millim.

Hab. Rio Cauquete, Cauca River, Colombia. Altitude

Type. B.M. no. 99. 9. 6. 5. Collected 15th June, 1898, by J. H. Batty. Three specimens examined, all precisely alike. This subspecies differs from panamensis by its blackish face and more heavily black-washed back.

^{*} Ann. & Mag. N. H. (6) xx. p. 544 (1897).

Dasypterus ega, typical form.

General colour buffy white, without or with scarcely any dark at the bases of the hairs.

Hab. Amazonian Valley and Pernambuco, from which latter place came the type of Tomes's Lasiurus caudatus*.

Other Brazilian specimens in spirit seem referable to this

form.

Dasypterus ega argentinus, subsp. n.

General colour dull buffy, near Ridgway's "cream-buff," but dirtier; not unlike that of ega. But the dorsal hairs are prominently black at their bases and finely black at their tips. Head more whitish grey than back, the lips slightly darker. Hairs on interfemoral dull yellowish. Under surface like upper, but the hairs without black tips.

Forearm of type 44.5 millim.

Hab. Goya, Corrientes, Argentina.

Type. Male. B.M. no. 98. 3. 4. 9. Collected 29th March,

1896, by Mr. R. Perrens. Two specimens.

This southern form differs from true ega by its paler colour, still paler head, and the prominent dark bases to the dorsal hairs, these dark bases being nearly or quite obsolete in the Amazonian form.

Besides the skins, a number of specimens in spirit from the same subregion appear to be similarly coloured. Thus I should refer to argentinus examples in the British Museum from the Bolivian Chaco (Borelli), Paraguayan Chaco (Boggiani), and Esperanza, Sante Fé (Lindner), and no doubt all members of this species recorded from Argentina belong to the present subspecies.

It is interesting to note that the paler forms xanthinus and argentinus are at the two extremes of the range of the species, and the dark subspecies panamensis and fuscatus occupy an

intermediate geographical position.

Felis pajeros crucina, subsp. n.

It has been noticed by many authors, notably d'Orbigny and Gervais in 1844 +, and Elliot ‡ in 1883, that different specimens of the Pampas Cat varied noticeably in the character of their colour-markings-the southern ones differing, as the first-named authors put it, by the less fulvous tint

^{*} P.Z. S. 1857, p. 42. † Guérin, Mag. Zool. (2) Mamm. pl. lviii. & text. † Mon. Felidæ, pl. xi. & text.

of their fur, the more or less complete effacement of their lateral bands, and the blackish colour of the rings on the limbs. Elliot merely speaks of there being two styles of coloration, without connecting the difference with geography.

But a comparison of the specimens in the Museum, and of the descriptions given by various authors, shows at once that it is the Argentine (and perhaps Chilian) form only that corresponds to Azara's description *, on which the name pajeros is based, and that the southern, Patagonian, ones are

sufficiently distinct to require a special name.

Taking as type the fine Santa Cruz specimen † obtained by Darwin during the voyage of the 'Beagle,' described and figured by Waterhouse ‡, I propose to apply the above term to it. Additional detailed description is not necessary, but I may enlarge the notes above quoted from d'Orbigny and Gervais by saying that the back of the ear is grey basally and black terminally, instead of fulvous narrowly edged with black, the back is more thickly haired and less markedly crested, the tail appears to be shorter and more thickly furred, and the fulvous ("cannelle") marking on the chest is more or less replaced by black and white. Elliot's two figures, though over-coloured, show the two subspecies very well. In the skull the only difference seems to be that in crucina the posterior palatal opening is markedly wider than in pojeros, and even this may not prove to be constant.

Dr. Matschie § has made some observations on Argentine and Chilian specimens of this group, but does not refer to

the extreme southern form.

Nasua quichua, sp. n.

Most closely allied to N. montana, Tschudi, but rather

smaller and very different in colour.

Colour, broadly speaking, grey anteriorly and bright rusty posteriorly. Face grizzled grey, with blackish markings on sides of muzzle, reaching back to eyes; white markings above and below posterior half of eyes. Crown and nape olivaceous yellow, with scarcely a trace of central dark streak; region between ears clearer grey. Ears thickly clothed outside and in with greyish-white hairs, those of the back dark basally. Anterior half of body coarsely grizzled grey, the long hairs yellowish white for three fourths their length,

§ SB. Ges. Freund. Berl. 1894, p. 60.

^{*} Ess. Quadr. Paraguay, i. p. 179 (1801).

[†] B.M. no. 55. 12. 24. 261. † Zool. Voy. 'Beagle,' Mamm. p. 18, pl. ix. (1838).

their tips broadly black along the median area, these tips lessening and gradually disappearing on the sides: underfur dark chocolate-brown. Posterior half of body bright rufous, the long hairs black for their basal two thirds, then fulvous, with narrow black tips: underfur here quite black. Tail, in continuation with the posterior back, grizzled red, not ringed above, and only indistinctly ringed below with whitish. Under surface dull whitish, the brown underfur showing through. Limbs, both fore and hind, grizzled fulvous proximally, black distally.

Skull smaller than in N. montana, scarcely longer, though more heavily built, than that of N. olivacea. Nasal region round, not pinched in as in N. olivacea. Ridges on posterior palate less developed than in N. montana. Bullæ decidedly

larger than in that species.

Dimensions of the type (approximate) (measured in skin):— Head and body 620 millim.; tail 390; hind foot, s. u. 77,

c. u. 85; ear 28.

Skull: greatest length 114; basal length 99.5; greatest breadth 59.5; interorbital breadth 22; breadth of brain-case 41; palate length from gnathion 68.3; combined length of three upper molars 17.5.

Hab. Jima, Central region of Cordilleras, Province of

Azuay, Ecuador. Altitude 2480 m.

Type. Male. B.M. no. 77. 4. 3. 5. Collected by Mr.

Clarence Buckley.

This species no doubt represents in Ecuador the Peruvian N. montana, from which it differs in various details. It has no close relationship either to the ordinary large Nasuas on the one hand, or to the small-toothed N. olivacea on the other.

Nasua olivacea meridensis, subsp. n.

Similar to the typical form in all respects, in size, quality of fur, in skull and dentition, but distinguished by there being a more or less obvious blackish line down the back, either commencing on the withers or indistinctly continuous with the median facial dark line.

Size as in the typical subspecies, much less than in any other known Nasua. General colour coarsely grizzled olivaceous brown. Under surface dull brown. Face greyish brown, lighter over the eyes, and with the usual dark median black line running from the muzzle to the crown. Ears clothed inside and out with pale brown hairs, scarcely lighter at the edge. In the typical form the hairs of the edge are

much lighter than those on the back. Limbs blackish brown. Tail about as long as the body without the head, ringed with black and dull whitish.

Skull and teeth as in the typical form.

Dimensions of the type (measured in the flesh):-

Head and body 540 millim.; tail 275; hind foot, s. u. 69,

c. u. 74; ear 40.

Skull: greatest length 113; zygomatic breadth 50; interorbital breadth 21.5; palate length from gnathion 69; combined length of three upper molars 12.5.

Hab. Culata Mts., Merida, Venezuela. Altitude 4000 m. Type. Male. B.M. no. 98, 7, 1, 4. Collected 6th June, 1897, by Señor S. Briceño. Three specimens examined.

The remarkable small-toothed species N. olivacea was described by Gray on an example from Bogota. Other examples from the same region have since been received; they all equally differ from N. o. meridensis by their uniform colour, without trace of dorsal stripe.

Nectomys esmeraldarum, sp. n.

A small species allied to N. russulus, Thos. *

Size much less than in any known species of Nectomys, about as in Oryzomys flavicans, to which and to other members of that genus there is a general superficial resemblance. Fur glossy, close, the hairs of the back about 11 millim. in length. General colour of the type and most adult specimen rich shining rufous, darker on the top of the head and along the back, clearer along the sides. Under surface soiled rufous buffy, not sharply defined; the bases of the hair everywhere slaty grey. Ears short, rounded, naked. Hands brown above, the digits lighter. Feet large in proportion to the size of the animal, more or less twisted, as is commonly the case in aquatic animals, and with large powerful claws, their upper surface uniformly brown. Tail thinly haired, finely scaled, the rings of scales about 14 to the centimetre, uniformly dark brown throughout.

Skull with the general build of the other species of Nectomys, stout and well ridged. Nasals remarkably narrow throughout, and so attenuated in their posterior two thirds that the two bones together are no broader than one of the premaxillary processes outside them. Supraorbital ridges well developed, overhanging the orbits more than usual, and continued backward across the parietal to the outer corners of

^{*} Ann. & Mag. N. H. (6) xx, p. 547 (1897).

the interparietals. Palatal foramina short, not nearly reaching to the molars. Posterior nares wide, though not so wide as in N. russulus. Incisors broad and powerful. Molars broad and short, their structure as in the allied species.

Dimensions of the type (measured in the flesh):-

Head and body 141 millim.; tail 149; hind foot, s. u. 33,

c. u. 36; ear 15.

Skull: greatest length 34; basilar length 27; greatest breadth 18·2; nasals, length 14, greatest breadth 3·8, breadth at half their length 2·1; interorbital breadth 5·9; interparietals 2·9 × 8; palate length 16·5; diastema 10; palatal foramina 5·4; length of upper molar series 5·3.

Hab. St. Javier, Esmeraldas Prov., N.W. Ecuador. Alti-

tude 20 m.

Type. Male. B.M. no. 1. 3. 19. 8. Collected 11th July,

1900. Three specimens examined.

This is a most interesting species, as forming with N. russulus a special group less adapted for an aquatic life than the typical Nectomys. Like that species, it has a very Oryzomyslike general appearance, and might easily be supposed to be a member of that genus if the skull were not examined. Allen's Sigmodontomys alfaroi is also probably a member of the same group.

N. esmeraldarum is very readily distinguishable both from N. russulus and Dr. Allen's alfaroi by its smaller size, more broadly ridged skull, and different colour. Its unusually narrow nasals may perhaps prove to be abnormal, as a younger specimen than the type has them already slightly

broader.

Oryzomys tectus, sp. n.

A large species with a general resemblance to the O. flavicans group, but brighter-coloured and with remarkably ex-

panded supraorbital ridges.

Size fairly large. Fur long, close, straight, and crisp; hairs of back about 13 millim in length and very uniform. General colour above rich uniform tawny fulvous, but little lined with black. Sides brighter and more ochraceous. Face duller and greyer mesially, the upper lips fulvous. Ears short, rounded, a tuft of ochraceous hairs behind their posterior bases. Chin white, the hairs white to their bases. Rest of under surface buffy, continuous with but paler than the colour of the sides; the hairs everywhere slaty basally. Upper surface of hands and feet pale buffy; palms and soles flesh-coloured. Tail of average length, finely and thinly

haired, the scales not hidden; brown above, white below,

especially proximally.

Skull stoutly built and quite unlike that of any of the allied species in the great development of the supraorbital ridges, which are expanded and overhanging somewhat as in the otherwise very different O. chrysomelas, Allen. The frontal region is strongly concave on each side internal to the ridges, which project about 1½ millim. outwards and slightly upwards. Behind the ridges pass round across the parietals in the usual way. Muzzle rather heavily built. Nasals evenly tapering backwards, ending just level with the premaxillary processes. Palatal foramina small, not reaching to the level of the molars. Molars light and delicate.

Dimensions of the type (measured in the flesh):—

Head and body 140 millim.; tail 142; hind foot, s. u. 27,

c. u. 29.5; ear 18.

Skull: tip of nasals to back of interparietal 33; greatest breadth 17; nasals 11.6×4 ; interorbital breadth 6.5; palate length 13.8; diastema 8.1; palatal foramina 5×2.2 ; length of upper molar series 4.9.

Hab. Bogava, Chiriqui, Panama. Altitude 250 m.

Type. Male. B.M. no. 0. 7. 11. 43. Original number 64. Collected 15th September, 1898, by Mr. H. J. Watson.

The striking characters of colour and skull-structure will readily separate this fine species from any of its congeners.

Oryzomys panamensis, sp. n.

A rich fulvous member of the O. laticeps group.

Size about as in other members of the group. Fur close, crisp, and velvety; hairs of back about 6-7 millim. in length. General colour above bright tawny or tawny ochraceous from nape to tail, finely lined with blackish on the back, brighter and clearer on the sides. Head more greyish. Under surface soiled grey, fairly sharply defined, the hairs short, their basal halves everywhere slaty and their terminal white. Ears short, rounded, very finely haired, uniformly brown. Outer sides of arms and legs greyer than body, inner sides like belly; hands and feet whitish above; palms and soles pale flesh-colour. Tail of medium length, thinly haired, the scales not hidden; pale brown above and white below.

Skull in size and proportions very like that of O. velutinus, All. & Chapm. Nasals very narrow, evenly tapering backwards. Supraorbital edges sharply and finely beaded, without heavy ridges. Palatal foramina short, not nearly reaching to the molars. Molars small, narrow, and delicate.

Dimensions of the type (measured in the flesh):

Head and body 131 millim.; tail 130; hind foot, s. u. 27,

c. u. 28.5; ear 18.

Skull: tip of nasals to front of interparietal 28.5; zygomatic breadth 16.4; nasals 12.5 × 3.5; interorbital breadth 5; diastema 8.9; palatal foramina 4.7 x 2.5; length of molar series 4.2.

Hab. Panama (City of). "Trapped in yucca cultivation

near open Savanna."

Type. Female. B.M. no. 0. 5. 1. 67. Collected 25th

February, 1899, by E. André.

This species is most like O. velutinus, but may be distin-pished by its brighter fulvous-tawny colour. The other guished by its brighter fulvous-tawny colour. members of the group are more brown or rufous.

Eligmodontia callosa boliviæ, subsp. n.

General colour above mouse-grey, more or less washed with dull yellowish, which latter colour varies in intensity in the different specimens, and is most marked on the rump. Sides more buffy, an indistinct buffy line edging the belly. Under surface uniform pale buffy, not sharply defined, the hairs slaty basally. Centre of face like back, cheeks like sides. Ears of medium size, thinly haired, greyish, not or scarcely darker than the body; the usual whitish postauricular spot less developed than in other members of the group. Arms and legs greyish white, hands and feet clear buffy white. Tail very finely scaled, closely and finely haired, brown above, whiter below.

Skull very like that of the typical form, with the same evenly divergent, well-marked, supraorbital ridges, long palatal foramina, and other details. Molars smaller and lighter throughout.

Dimensions of the type (measured in the flesh):-

Head and body 106 millim.; tail 82; hind foot (s. u.) 21; ear 19.

Skull: greatest length 28.8; basilar length 22.2; greatest breadth 14.6; nasals 11.8 × 3.7; interorbital breadth 3.6; diastema 7.4; palatal foramina 6.6 x 2.2; length of upper molar series 4.1.

Hab. Rio Solocame, 67° W., 16° S. Bolivia. Altitude 1200 m. Other specimens from Yungas, 1500 m., and

Astillero, 2700 m.

Type. Male. B.M. no. 1. 6. 7. 43. Original number 1325. Collected 24th January, 1901, by P. O. Simons. Five specimens examined.

This Eligmodontia is clearly the Bolivian representative of E. callosa, Rengg., from which it differs by its rather smaller teeth and more buffy under surface.

"Phyllotis" sublimis and the Species of Reithrodon and Euneomys.

A further examination of the peculiar mouse recently described as Phyllotis sublimis * shows that the incisors, although practically ungrooved in the type, are indistinctly grooved in younger specimens. The grooving is very faint, but not fainter than is often the case in specimens of Reithrodon pictus, to whose neighbourhood I now think Phyllotis sublimis should be transferred. Viewed as a Phyllotis, the species always appeared anomalous, and the incisors have evidently now given a proper indication of its affinities; for its relationship in essential characters to Reithrodon pictus is quite clear, greatly as it differs in size and other specific marks.

But in transferring the species the question of the division of "Reithrodon" into two has been again examined, and I now think, especially since the removal of Sigmonys Alstonit, that Coues's suggestion t as to the breaking up of Waterhouse's genus into Reithrodon and Euneomys should be adopted, the two groups differing markedly in both cranial and dental structure. The wide difference in the formation of the last upper molar is especially noteworthy.

The species of South-American groove-toothed Muridæ

would then be allocated as follows:-

I. Reithrodon, Waterhouse.

Species: R. cuniculoides, Waterh. R. typicus, Waterh.

II. EUNEOMYS, Coues.

Species: E. chinchilloides, Waterh.

E. pictus, Thos. E. sublimis, Thos. E. fossor, Thos.

III. SIGMOMYS, Thos.

Species: S. Alstoni, Thos. S. savannarum, Thos.

* Ann. & Mag. Nat. Hist. (7) vi. p. 467 (1900).

† Op. cit. viii. p. 150 (1901). † Proc. Acad. Philad, 1874, p. 185.

The northern Reithrodontomys also just enters South America, a single species-R. Söderströmi-occurring in Ecuador.

The exact position of Phyllotis boliviensis is also somewhat doubtful, as, in spite of its ungrooved incisors, it shows many points of resemblance to Euneomys pictus and sublimis.

These conclusions have been arrived at in consultation and agreement with Dr. J. A. Allen, whose advice has naturally been of much assistance to me.

XXXIV.—New Species of Macroscelides and Glauconycteris. By Oldfield Thomas, F.R.S.

Macroscelides somalicus, sp. n.

Closely allied to M. Peasei* from Abyssinia, agreeing with that species in size and all important characters. But the general colour is quite different, being paler and of a more fulvous or pinkish-buffy tone, not to be matched in Ridgway-something between ochraceous buff and vinaceous buff would be the nearest. This colour is only spread over the dorsal area, the flanks being abruptly paler and greyer. Postauricular patches well-marked fulvous buffy, whiter close to the bases of the ears. Other characters as described in M. Peasei.

Dimensions of the type, a fully adult male (measured in the flesh):—

Head and body 117 millim.; tail 146 †; hind foot (s. u.)

33; ear 24.

Skull: greatest length 36; basal length 31; greatest breadth 20.5; length of nasals 13.5; interorbital breadth 6.1; length of upper tooth-row 18.

Hab. Arabsiyo, Somaliland. Altitude 4000 feet.

Type. Adult male. B.M. no. 98. 6. 9. 2. Collected December 1, 1897, and presented by R. McD. Hawker, Esq. Another younger specimen from the same region collected and presented by E. Lort Phillips, Esq.

These specimens had been wrongly assigned to M. Revoilii, Huet, of which the Museum now contains a good series pre-

sented by Dr. A. E. Atkinson.

^{*} Ann. & Mag. N. H. (7) viii. p. 154 (1901).
† This seems overstated. In its present condition the tail is rather more than 130 millim. long.